THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte ELIZABETH E. BENEDETTO, JOHN W. LYONS and STEWART P. WOOD

_____

Appeal No. 95-3208
Application 08/067,307[1]

_____

ON BRIEF

_____

Before HAIRSTON, KRASS and FLEMING, ***Administrative Patent Judges***.

FLEMING, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 18, all of the claims pending in the application.

The invention relates to an apparatus and method for using

[1]Application for patent filed May 26, 1993.

light scattering to measure the size of particles suspended in a fluid medium.

The only independent claims 1 and 8 present in the application are reproduced as follows:

> 1. In an apparatus for determining the size of particles suspended in a medium, said apparatus being of the type having a means for producing a beam of light;
>
> a means for exposing the particles to the beam of light, whereby the light which contacts the particles is scattered;
>
> and a means for detecting the light over a given collection angle after it has passed through the means for exposing the particles to the beam of light, the improvement comprising:
>
> > a spatial filter for reducing the collection angle to less than about 3E.
>
> 8. A method for determining the size of a particle suspended in a medium comprising:
>
> > (a) passing the medium containing the particle through a beam of light, so that the light which contacts the particle will be scattered;
> >
> > (b) detecting the light which was not scattered by the particle;
> >
> > (c) deterring the light which was scattered by the particles from being detected, such that only light which falls within a collection angle of 1E or less is detected; and
> >
> > (d) determining the size of the particle from the decrease in light detected as the particle passed through the beam of light.

The references relied on by the Examiner are as follows:

Fulwyler et al. (Fulwyler)	3,710,933	Jan. 16, 1973
Colombo et al. (Colombo)	4,329,052	May 11, 1982
Kamimoto[2] (Japanese)	JP 62-273431	Nov. 27, 1987

Claims 1, 8 and 13 through 18 stand rejected under 35 U.S.C. § 102 as being anticipated by Fulwyler. Claims 2 through 7 and 9 through 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Fulwyler in view of Kamimoto and Colombo.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the brief and the answer for the details thereof.

OPINION

After a careful review of the evidence before us, we agree with the Examiner that claims 1 and 13 through 15 are properly rejected under 35 U.S.C. § 102 and that claims 3 through 5 and 7 are properly rejected under 35 U.S.C. § 103. Thus, we will sustain the rejection of these claims but we will reverse the rejection of remaining claims on appeal for the reasons set forth ***infra***.

At the outset, we note that Appellants have indicated on page 3 of the brief that the claims do not stand or fall together. However, on pages 4 through 6 of the brief, we note

[2]Translation attached.

that Appellants argue claims 1 and 8 separately in regard to the 35 U.S.C. § 102 rejection, and do not argue claims 13 through 18 separately, but as a group. 37 CFR § 1.192(c)(7) (1997) states:

> For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and
>
> shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together, and in the argument under paragraph (c)(8) of this section appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.

As per 37 CFR § 1.192(c)(5), which was controlling at the time of Appellants filing the brief, we will, thereby, consider Appellants' claims 1 and 13 through 15 to stand or fall together, with claim 1 being considered the representative claim and claims 8 and 16 through 18 to stand or fall together, with claim 8 being considered the representative claim.

Appellants argue on page 5 of the brief that in their invention, the entire beam of light will strike the detector when no particle is being analyzed. Appellants argue that this feature of the invention is claimed in step (b) of claim 8, which recites, "detecting the light which was not scattered by the particle" and in claim 1, which recites, "a means for detecting

the light over a given collection angle." Appellants argue that Fulwyler, on the other hand, teaches only detecting the light that has been deflected by the particle and not detecting the light which was not scattered by the particle as recited in Appellants' claims.

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. ***See In re King***, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and ***Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co***., 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." ***RCA Corp. v. Applied Digital Data Systems, Inc.***, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), *cert. dismissed,* 468 U.S. 1228 (1984), *citing* ***Kalman v. Kimberly-Clark Corp.***, 713 F.2d 760, 772 218 USPQ 781, 789 (Fed. Cir. 1983).

Turning to Figure 5, Fulwyler teaches that the light that is scattered is collected by a photodiode while the direct beam from the laser is passed to a beam dump. Thus, Fulwyler does not

teach "detecting the light which was not scattered by the particle" as recited in Appellants' claim 8. Therefore, we will not sustain the Examiner's rejection of claims 8 and 16 through 18.

Turning to Appellants' claim 1, we fail to find that the claimed language requires that the detected light is the direct beam of the light. Appellants' claim 1 only requires that the detector detects the light over a given collection angle. Appellants' claim 1 does not preclude a reading of the claim language on a detector that detects the scattered light over a given collection angle. We note that Fulwyler teaches in column 8, lines 58-64, that the detector detects the scattered light over a collection angle between 0.5 and 2.0 degrees. Therefore, we find that Fulwyler teaches all of the limitations recited in Appellant's claim 1. Therefore, we will sustain the Examiner's rejection of claims 1 and 13 through 15.

We further note that Appellants did not argue that means of detecting as recited in Appellants' claim 1 corresponds to structure found in Appellants' specification under 35 U.S.C. § 112, sixth paragraph. We are not required to raise and/or consider such issues when Appellants have not argued them. As

stated by our reviewing court in ***In re Baxter Travenol Labs.***, 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991), "[i]t is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for nonobvious distinctions over the prior art." 37 CFR 1.192(a) as amended at 58 F.R. 54510 Oct. 22, 1993, which was controlling at the time of Appellants' filing the brief, states as follows:

> The brief ... must set forth the authorities and arguments on which the appellant will rely to maintain the appeal. Any arguments or authorities not included in the brief may be refused consideration by the Board of Patent Appeals and Interferences.

Also, 37 CFR § 1.192 (c)(8)(iii)(1997) states:

> For each rejection under 35 U.S.C. § 102, the argument shall specify the errors in the rejection and why the rejected claims are patentable under 35 U.S.C. § 102, including any specific limitations in the rejected claims which are not described in the prior art relied upon in the rejection.

Thus, 37 CFR § 1.192 provides that just as the court is not under any burden to raise and/or consider such issues, this board is not under any greater burden.

Turning to the rejection under 35 U.S.C. § 103, it is the burden of the Examiner to establish why one having ordinary skill

in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). In addition, the Federal Circuit states that

"[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 117 S.Ct. 80 (1996), ***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984). In addition, the Federal Circuit reasons in **Para-Ordnance Mfg.**, 73 F.3d at 1087-88, 37 USPQ2d at 1239-40, that for

the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem, and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants.

Appellants argue on page 7 of the brief that neither Fulwyler, Kamimoto nor Colombo teaches or suggests a spatial filter which includes a detector extender. We note that Appellants' claim 2 recites that the "spatial filter includes a detector extender located between the means for exposing the particles to the beam of light and the light detection means, wherein the detector extender blocks ambient light and is of sufficient length to deter light which was scattered by the particles from reaching the detector." Appellants also argue on pages 7 and 8 of the brief that the references fail to teach or suggest using a fiber optic cable as a spatial filter as recited in Appellants' claim 6.

On page 5 of the answer, the Examiner argues the Appellants' statement on pages 8-10 as evidence that the optical fiber may be substituted by a pinhole for reducing the collection angle.

However, we fail to find that the Appellants' statement is an admission of what is known in the prior art, but instead is a disclosure of Appellants' invention. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." ***Para-Ordnance Mfg. v. SGS Importers Int'l***, 73 F.3d at 1087, 37 USPQ2d at 1239, ***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or by common knowledge of unquestionable demonstration. Our reviewing court requires this evidence in order to establish a ***prima facie*** case. ***In re Knapp-Monarch Co.***, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); ***In re Cofer***, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Therefore, we will not sustain the Examiner's rejection of claims 2 and 6.

We note that the Appellants have not argued claims 3, 4, 5 and 7. After a careful review of the cited art and the Examiner's reasoning presented in the answer, we will sustain the Examiner's rejection of these claims.

In view of the foregoing, the decision of the Examiner rejecting claims 1 and 13 through 15 under 35 U.S.C. § 102 and claims 3 through 5 and 7 under 35 U.S.C. § 103 is affirmed; however, the decision of the Examiner rejecting claims 8 and 16 through 18 under 35 U.S.C. § 102 and claims 2 and 6 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

KENNETH W. HAIRSTON Administrative Patent Judge	)
ERROL A. KRASS Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
MICHAEL R. FLEMING Administrative Patent Judge	)

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